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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Application Number 10/765,430

Filling Date January 26, 2004

First Named Inventor Guillermo J. Tearney

Art Unit 3737

Examiner Name To be assigned

Attorney Docket Number 036140/US - 475387-00020

(to be used for all correspondence after initial filing)	Examiner Name	To be assigned						
Total Number of Pages in This Submission	Attorney Docket Number	036140/US - 4	75387-00020					
ENCLOSURES (Check all that apply)								
Fee Transmittal Form Fee Attached Amendment/Reply After Final Affidavits/declaration(s) Extension of Time Request Express Abandonment Request Information Disclosure Statement Certified Copy of Priority Document(s) Reply to Missing Parts/ Incomplete Application Reply to Missing Parts under 37 CFR 1.52 or 1.53	Drawing(s) Licensing-related Papers Petition Petition to Convert to a Provisional Application Power of Attorney, Revocation Change of Correspondence A Terminal Disclaimer Request for Refund CD, Number of CD(s) Landscape Table on CD	ddress	After Allowance Communication to TC Appeal Communication to Board of Appeals and Interferences Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) Proprietary Information Status Letter Other Enclosure(s) (please Identify below): PTO-1449 form with references and Return Receipt postcard					
	OF APPLICANT, ATTO	RNEY, OR	AGENT					
Firm Name Dorsey & Whitney, L.L.P.								
Signature								
Printed name Gary Abelev, Esq.								
Date May 30, 2007 Reg. No. 40,479								
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Gary Abelev, Esq.

Typed or printed name

Date | May 30, 2007

036140/US - 475387-00020 PATENT

VIEW NITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s) : Guillermo J. Tearney et al.

Serial No. : 10/765,430

Filed: January 26, 2004

Entitled : SYSTEM AND METHOD FOR IDENTIFYING TISSUE USING

LOW-COHERENCE INTERFEROMETRY

Group Art Unit : 3737

Examiner : To be assigned

Confirmation No. : 1546

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 I hereby certify that this document is being sent via First Class U. S. mail addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22213-1450 on this day of May 30, 2007.

(Signature)

Dear Sir:

Pursuant to 37 C.F.R. §§ 1.56 and 1.97(b), applicants bring to the attention of the Examiner the documents listed on the attached Form PTO-1449, and respectfully request that the listed documents be considered by the Examiner and made of record in the above-captioned application. Copies of the United States patent references listed on the Form PTO-1449 are not enclosed, but the foreign and non-patent references are enclosed.

This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that the listed documents are material or constitute "prior art." If the Examiner applies the documents as prior art against any claim in the application and applicants determine that the cited documents do not constitute "prior art" under

036140/US - 475387-00020 PATENT

United States law, applicants reserve the right to present to the Office the relevant facts and law

regarding the appropriate status of the documents.

Applicants further reserve the right to take appropriate action to establish the

patentability of the disclosed invention over the listed documents, should the documents be

applied against the claims of the present application.

This submission is being filed before any action by the U.S. Patent and

Trademark Office on the merits. Therefore, applicants do not believe that any fee is due in

connection with the submission of this paper. However, if any fee is due, or if any overpayment

has been made, the Commissioner is authorized to charge any such fee or credit any

overpayment, to our Deposit Account No. 50-2054.

Respectfully submitted,

DORSEY & WHITNEY, LLP

May 30, 2007

Gary Abelev

PTO Reg. No. 40,479

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Form PTO-14	9 U.S. Department of Commerce
(REV. 2-82)	Patent and Trademark Office

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Several sheets if necessary)

Atty. Docket No. 036140/US – 475387-00020

Applicant(s)

Guillermo J. Tearney et al.

Filing Date January 26, 2004 Group 3737

U.S. PATENT DOCUMENTS

*Exam. Init.		Document No.						Date	Name	Class	Subclass	Filing Date if Appropriate	
		6	2	4	9	3	4	9	June 19, 2001	Lauer******			
	2002	0	0	8	5	2	0	9	July 4, 2002	Mittleman et al.			
		7	0	0	6	2	3	1	February 28, 2006	Ostrovsky et al.			
		6	1	3	4	0	0	3	October 17, 2000	Tearney et al. *******			

*******References cited in Office Action dated December 6, 2006 for U.S. Patent Application No. 10/997,789
********References cited in Office Action dated December 18, 2006 for U.S. Patent Application No. 10/501,276

FOREIGN PATENT DOCUMENT

	Document No.						Date	Country	Class	SubClass	Transl Yes	ator No

OTHER DOCUMENTS (including Author, Title Date, Pertinent Pages, Etc.)

	Copy of Office Action dated December 6, 2006 for U.S. Patent Application No. 10/997,789
	Elliott, K. H. "The use of commercial CCD cameras as linear detectors in the physics undergraduate teaching laboratory", European Journal of Physics 19, 1998, pages 107-117 ********
	Lauer, V. "New approach to optical diffraction tomography yielding a vector equation of diffraction tomography and a novel tomographic microscope", Journal of Microscopy Vol. 205, Issue 2, 2002, pages 165-176 *******
***************************************	Yu, P. et al. "Imaging of tumor necroses using full-frame optical coherence imaging", Proceedings of SPIE Vol. 4956, 2003, pages 34-41*******

Examiner	Date Considered	

^{*} Examiner: Initial citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Page 2 of 5 Form PTO-1449 U.S. Department of Commerce Serial No. Atty. Docket No. (REV. 2-82) Patent and Trademark Office 036140/US - 475387-00020 10/765,430 INFORMATION DISCLOSURE STATEMENT BY APPLICANT Applicant(s) (Use several sheets if necessary) Guillermo J. Tearney et al. Filing Date Group January 26, 2004 3737 Zhao, Y. et al. "Three-dimensional reconstruction of in vivo blood vessels in human skin using phase-resolved optical Doppler tomography", IEEE Journal of Selected Topics in Quantum Electronics 7.6 (2001): 931-935******* Copy of Office Action dated December 18, 2006 for U.S. Patent Application No. 10/501,276 Devesa, Susan S. et al. (1998) "Changing Patterns in the Incidence of Esophegeal and Gastric Carcinoma in the United States." American Cancer Society Vol. 83, No. 10 pp. 2049-2053 Barr, H et al. (2005) "Endoscopic Therapy for Barrett's Oesophaugs" Gut Vol. 54:875-884 Johnston, Mark H.(2005) "Technology Insight: Ablative Techniques for Barrett's Esophagus – Current and Emerging Trends" www.Nature.com/clinicalpractice/gasthep Falk, Gary W. et al. (1997) "Surveillance of Patients with Barrett's Esophagus for Dysplasia and Cancer with Ballon Cytology" Gastrorenterology Vol. 112, pages 1787-1797 Sepchler, Stuart Jon. (1997) "Barrett's Esophagus: Should We Brush off this Balloning Problem?" Gastroenterology Vol 112, pages 2138-2152 Froehly, J. et al. (2003) "Multiplexed 3D Imaging Using Wavelength Encoded Spectral Interferometry: A Proof of Principle" Optics Communications Vol 222, pages 127-136 Kubba A.K. et al. (1999) "Role of p53 Assessment in Management of Barrett's Esophagus" Digestive Disease and Sciences Vol. 44, No 4. pages 659-667 Reid, Brian J. (2001) "p53 and Neoplastic Progression in Barrett's Esophagus" The American Journal of Gastroenterology Vol. 96, No 5, pages 1321-1323 Sharma, P. et al. (2003) "Magnification Chromoendoscopy for the Detection of Intestinal Metaplasia and Dysplasia in Barrett's Oesophagus" Gut Vol. 52, pages 24-27 Kuipers E.J et al. (2005) "Diagnostic and Therapeutic Endoscopy" Journal of Surgical Oncology Vol. 92, pages 203-209 Georgakoudi, Irene et al. (2001) "Fluorescence, Reflectance, and Light-Scattering Spectroscopy for Evaluating Dysplasia in Patients with Barrett's Esophagus" Gastroenterology Vol. 120, pages 1620-

Examiner	Date Considered

Adrain, Alyn L. et al. (1997) "High-Resolution Endoluminal Sonography is a Sensitive Modality for the Identification of Barrett's Meaplasia" Gastrointestinal Endoscopy Vol. 46, No. 2, pages 147-

^{*} Examiner: Initial citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Page 3 of 5 Form PTO-1449 U.S. Department of Commerce Atty. Docket No. Serial No. (REV. 2-82) Patent and Trademark Office 036140/US - 475387-00020 10/765,430 INFORMATION DISCLOSURE STATEMENT **BY APPLICANT** Applicant(s) Guillermo J. Tearney et al. (Use several sheets if necessary) Filing Date Group January 26, 2004

3737

	Juliani 20, 2001
1	
	Canto, Marcia Irene et al (1999) "Vital Staining and Barrett's Esophagus" Gastrointestinal Endoscopy Vol. 49, No. 3, part 2, pages 12-16
	Evans, John A. et al. (2006) "Optical Coherence Tomography to Identify Intramucosal Carcinoma and High-Grade Dysplasia in Barrett's Esophagus" Clinical Gastroenterology and Hepatology Vol. 4, pages 38-3
	Poneros, John M. et al. (2001) "Diagnosis of Specialized Intestinal Metaplasia by Optical Coherence Tomography" Gastroenterology Vol. 120, pages 7-12
	Ho, W. Y. et al. (2005) "115 KHz Tuning Repetition Rate Ultrahigh-Speed Wavelength-Swept Semiconductor Laser" Optics Letters Col. 30, No. 23, pages 3159-3161
	Brown, Stanley B. et al. (2004) "The Present and Future Role of Photodynamic Therapy in Cancer Treatment" The Lancet Oncology Vol. 5, pages 497-508
	Boogert, Jolanda Van Den et al. (1999) "Endoscopic Ablation Therapy for Barrett's Esophagua with High-Grade Dysplasia: A Review" The American Journal of Gastroenterology Vol. 94, No. 5, pages 1153-1160
	Sampliner, Richard E. et al. (1996) "Reversal of Barrett's Esophagus with Acid Suppression and Multipolar Electrocoagulation: Preliminary Results" <u>Gastrointestinal Endoscopy</u> Vol. 44, No. 5, pages 532-535
	Sampliner, Richard E. (2004) "Endoscopic Ablative Therapy for Barrett's Esophagus: Current Status" Gastrointestinal Endoscopy Vol. 59, No. 1, pages 66-69
	Soetikno, Roy M. et al. (2003) "Endoscopic Mucosal resection" Gastrointestinal Endoscopy Vol. 57, No. 4, pages 567-579
	Ganz, Robert A. et al. (2004) "Complete Ablation of Esophageal Epithelium with a Balloon-based Bipolar Electrode: A Phased Evaluation in the Porcine and in the Human Esophagus" <u>Gastrointestinal Endoscopy</u> Vol. 60, No. 6, pages 1002-1010
	Pfefer, Jorje at al. (2006) "Performance of the Aer-O-Scope, A Pneumatic, Self Propelling, Self Navigating Colonoscope in Animal Experiments" <u>Gastrointestinal Endoscopy</u> Vol. 63, No. 5, pages AB223
	Overholt, Bergein F. et al. (1999) "Photodynamic Therapy for Barrett's Esophagus: Follow-Up in 100 Patients" Gastrointestinal Endoscopy Vol. 49, No. 1, pages 1-7
	Vogel, Alfred et al. (2003) "Mechanisms of Pulsed Laser Ablation of Biological Tissues" <u>American Chemical Society</u> Vol. 103, pages 577-644
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Examiner	Date Considered	

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Examiner	Date Considered	
Cxammer	Date Considered	

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coherence tomography images", Optics Express Vol. 13, No. 25, October 4, 2005, pages 10200-

Ophthalmology & Visual Science, Vol. 46, No. 6, June 2005, pages 2012-2017

Ishikawa, Hiroshi et al. "Macular Segmentation with optical coherence tomography", Investigative

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Examiner Date Considered

^{*} Examiner: Initial citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.